

REMARKS/ARGUMENTS

Reexamination of the captioned application is respectfully requested.

A. SUMMARY OF THIS AMENDMENT

By the current amendment, Applicant basically:

1. Amends claims 1, 3, 14 and 20.
2. Respectfully traverses all prior art rejections.
3. Advises the Examiner of the filing of a Petition to Extend.

B. THE PRIOR ART REJECTIONS

Claims 1, 3-4, 9, 14-15, 18-21 and 23 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Publication 2004/0209615 to Lamb et al in view of U.S. Publication 2002/0058504 to Stanforth. Claims 5 and 22 under 35 USC 102(a) as being unpatentable over U.S. Publication 2004/0209615 to Lamb et al in view of U.S. Publication 2002/0058504 to Stanforth, further in view of U.S. Publication 2004/0208151 to Haverinen et al. All prior art rejections are respectfully traversed for at least the following reasons.

C. CLAIM AMENDMENTS

Independent claims 1 and 18 have been amended to further define the access controller. Particularly independent claims 1 and 18 now emphasize that the access controller (1) is assigned at least one location area in said licensed radio mobile network, the location area being separate and unique to said unlicensed radio access network; and (2) comprises a database for storing an identification of a mobile station in association with a network address for said mobile station on said broadband network, wherein said network address is unique to said mobile station so as to enable said access controller to page said mobile station for voice calls individually.

Method claim 14 has been amended to include the equivalent of last of these two amendments. This modified feature now reads,

"registering said mobile station identification information in association with said mobile station network address on said fixed broadband network, wherein said network address is unique to said mobile station so as to enable said access controller to page said mobile station for voice calls individually"

The latter amendment clarifies that a page request is for voice traffic only. This is reinforced by the assignment of a location area in the PLMN to the access controller, as location areas are for voice traffic only.

D. PATENTABILITY OF THE CLAIMS

As previously argued, Lamb does not describe a location area assigned to the WLAN network. Indeed, the WLAN network of Lamb (illustrated in the lower half of Fig. 4) cannot be assigned a location area as it is exclusively for data. The areas designated 440 and 450 do not appear to be described, but these cannot both be location areas as the WLAN network is exclusively for data, while the ANSI or GSM network (illustrated in the upper half of Fig. 4) is used for voice traffic (see [0029]).

Yet the assignment of a location area to the unlicensed radio access network is essential to the routing of voice calls from the PLMN to applicants' unlicensed radio access network, since without this the essentially transparent interface provided by the access controller could not function. As already discussed, the interworking point between the WLAN network and ANSI/OSM network of Lamb is the HLR/AAA server, which forms part of the core network portion of the ANSI/GSM network. This means that the exact routing to a mobile device in the WLAN is always known to the core network (see [0031]), which implies that the ANSI or GSM core network must be modified for the

architecture described in Lamb. This is not the case for Applicants as all call information leads directly to the access controller by virtue of the assigned location area, which performs the same function as any other location area in the PLMN. As a result, the PLMN core network is not implicated in the location of a mobile station operating in the unlicensed radio access network any more than it would be in a conventional GSM network. The task of identifying and routing a paging message to a paged mobile station operating within the unlicensed radio access network is accomplished solely by the access network (see the specification, page 12, line 9 through page 13, line 19).

Stanforth does not describe how the ad-hoc network fits into the switched cellular network, and specifically is silent about a location area identifying the ad-hoc network in the switched cellular network. Since this information is not in Lamb, the combined prior art of Lamb and Stanforth can not lead one of ordinary skill in the art to this feature.

While these differences are significant and should be sufficient to differentiate the claims from the prior art, the final feature of claims 1, 14 and 20 is also an important differentiating feature. This feature reads:

"said access controller being adapted to delete said identification data when said mobile station ceases to operate in the coverage areas of said unlicensed radio access network" in claims 1 and 20 and

"determining when a connection established with said mobile station is no longer maintained and deleting said mobile station identification information when it is determined that a connection is no longer maintained" in claim 14,

in conjunction with the features specified in claims 1 and 20 that the database, which stores the identification data, is comprised in the access controller and the method step specified in claim 14 of registering of this identification data by the access controller.

As previously argued neither Lamb nor Stanforth disclose the deletion of the stored identification data from the database comprised in the access controller when it is determined that a connection is no longer maintained or when the mobile station ceases to operate in the coverage area of the unlicensed radio access network. The office action has acknowledged that this feature is not disclosed in Lamb, but has consistently pointed to paragraph [0058] of Stanforth as disclosing the deletion of call information by the network gateway (see line 5-7 of page 4 and lines 1-2 of page 7 of the final Office Action). Once again, Applicants stress that neither paragraph [0058], nor any other paragraph of Stanforth describes the deletion of stored routing or identification information by the gateway controller 18 which the examiner has deemed as equivalent in function to the access controller of the present application. On the contrary, the cited paragraph and Fig. 19, which it describes, deals with the setting up and termination of a call from the ad-hoc network to an external network. Thus already it is clear that there is no question of the terminal ceasing to operate in the ad-hoc network in accordance with claims 1 and 20. Moreover, the passage referred to by the office action plainly states that it is the terminal (i.e. the mobile device) that deletes the call information:

“After call termination, the respective dedicated interface, or gateway, will release the call (block 176), and send the appropriate messaging back to the terminal via its associated gateway. The terminal will then update its routing table for that call (block 178), which essentially means it will erase that call's information from its routing table entirely. The terminal is then released from connection to its gateway (LAP) (block 180), and the host terminal returns to its idle state (block 182).” (emphasis added)

In fact, paragraph [0058] does not even mention stored routing information held by the gateway controller.

Since neither Lamb nor Stanforth disclose the deletion of stored identification and address information in a database held by an access controller or equivalent gateway controller, Applicants submit that the skilled person could not arrive at this final feature even this prior art teaching is combined.

In summary, therefore, at least the two features identified above are neither disclosed nor suggested by either Lamb or Stanforth. Applicants thus submit that claims 1, 14 and 20 and claims dependent thereon are not obvious in view of this prior art.

E. MISCELLANEOUS

In view of the foregoing and other considerations, all claims are deemed in condition for allowance. A formal indication of allowability is earnestly solicited.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for the entry of these papers and the continued pendency of the captioned application.

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

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